

## CLAIMS

What is claimed is:

1. A computerized interface for data presentation, comprising:  
a sorting component to determine categories relating to one or more items for display; and  
a cluster component that groups the categories according to discretized states in order to control visible output to the display.
2. The system of claim 1, further comprising a user interface for displaying the items and a data storage for storing the items.
3. The system of claim 1, the items includes at least one of documents, files, folders, sub folders, presentations, images, audio files, queries, archives, and code.
4. The system of claim 2, the user interface includes at least one of a tree display and a contents display representing items from the tree display.
5. The system of claim 2, the cluster component controls content merging of subordinate and sibling nodes at the user interface.
6. The system of claim 1, the states include at least one of a packed state and an unpacked state.
7. The system of claim 6, the states are persisted on a data storage component.
8. The system of claim 7, the states are associated with properties of a group.

9. The system of claim 8, the properties are associated with metadata relating to an item.
10. The system of claim 1, further comprising a group which is packed that is presented as a single entity when viewed from outside the group.
11. The system of claim 1, further comprising a group which is unpacked that is presented as disparate entities when viewed from outside the group.
12. The system of claim 1, further comprising a rules component for determining how the items are to be displayed.
13. The system of claim 1, further comprising a switch component for selecting between the discretized states.
14. The system of claim 13, further comprising an interface component to enable users to assign states to an item or group.
15. The system of claim 13, the switch component is a flag or code associated with a collection of data items indicating whether the collection is packed or unpacked.
16. The system of claim 1, further comprising an overlapping group that includes content from various groups.
17. The system of claim 16, the overlapping group includes a recycle group and an archive group.

18. The system of claim 16, further comprising a view of at least one group A and at least one group B that shows items in  $A \cap B$  and opening subgroup B, the items in  $A \cap B$  are viewed.
19. The system of claim 18, further comprising a viewer that determines a union of groups A and B.
20. The system of claim 1, further comprising an interface to display at least one of a static group and a dynamic group.
21. The system of claim 20, the dynamic group is associated with an unpacked query by default or assigns a packed state to an arbitrary dynamic query.
22. The system of claim 1, further comprising a component to predict initial or default states of newly created groups, the component selects the states automatically, or prompts a user to confirm the selection.
23. The system of claim 22, the system suggests a packed state if at least one of:
  - a name of a group contains recognizable words;
  - content of the group are of low importance; and
  - a type of the group indicates a compound document rather than a loose collection of items.
24. A computer readable medium having computer readable instructions stored thereon for implementing the cluster component and the sorting component of claim 1.

25. A system for organizing data at a computerized display, comprising:  
means for determining a state for a subset of data items;  
means for assigning the state as a property to the subset of data items; and  
means for displaying item according to the assigned state.
26. The system of claim 25, further comprising means for displaying the subset of data items as a packed group, an unpacked group, or an overlapping group.
27. The system of claim 26, further comprising means for controlling the display of the subset of data items.
28. A method for controlling visible output to a display, comprising:  
determining packed or unpacked states for a collection of data items;  
grouping the data items according to the determined states;  
hiding items from view associated with packed states;  
displaying items associated with unpacked states in a separate view.
29. The method of claim 28, further comprising associating the states with properties of a group.
30. The method of claim 29, further comprising persisting the properties to a storage medium.
31. The method of claim 29, further comprising at least one of processing, controlling, and displaying overlapping groups for the collection of data items.
32. The method of claim 31, further comprising displaying an icon representation for at least one of a packed group, an unpacked group, and the overlapping groups.

33. The method of claim 32, further comprising providing another display to view individual items of the unpacked group.
34. A computer readable medium having a data structure stored thereon, comprising:
  - a first data field related to at least one group property associated with a subset of data items for display;
  - a second data field for the data items; and
  - a third data field to control how the data items are to be directed to a computerized display.
35. The computer readable medium of claim 34, further comprising a field for describing rules to control the computerized display.
36. The computer readable medium of claim 34, further comprising a field to label the subset of data items in accordance with the group property.
37. The computer readable medium of claim 34, a switch field describing a desired state for the subset of data items.
38. The computer readable medium of claim 37, the state is associated with at least one of a packed state, an unpacked state, an overlapping state, and a dynamic state.